MECHANISM TO AVOID EXPLICIT PROLOGS IN SOFTWARE-PIPELINED LOOPS

Abstract of the Disclosure

The present invention provides a mechanism that facilitates speculative execution of instructions within software-pipelined loops. In accordance with one embodiment of the invention, a software-pipelined loop is initialized with a speculative instruction deactivated. At least one initiation interval of the software-pipelined loop is executed, and the speculative instruction is activated. Subsequent initiation intervals of the software-pipelined loop are then executed.